

these types. Also, memory 40 may be volatile, nonvolatile or a hybrid combination of volatile and nonvolatile varieties. Some or all of memory 40 can be of a portable type, such as a disk, tape, memory stick, cartridge, code chip or the like. Memory 40 can be at least partially integrated with processor 42 and/or may be in the form of one or more components or units.

[0074] In other embodiments, it is contemplated that the bG meter 20 may utilize a removable memory key that is plugable into a socket or other receiving means (not shown) of housing 22, and which communicates with the memory or controller of the meter 20 to provide information relating to calibration codes, measurement methods, measurement techniques, and information management. Examples of such removable memory keys are disclosed in U.S. Pat. Nos. 5,366,609 and 5,053,199, the disclosures of which are incorporated herein by reference in their entireties.

[0075] In one embodiment, memory 40 of bG meter 20 includes a calendar that stores a schedule of events which may be representative of times for measuring bG levels, taking medications, visiting a physician or performing other daily tasks, including attending work, school and/or meetings, just to name a few possibilities. In this embodiment, processor 42 is programmed so that an alarm or other indicator on bG meter 20 audibly or by vibration alerts the user to perform each event according to the schedule. Once the event has been completed, a user may provide an indication of same with user entry means 26 and processor 42 is programmed to process and record the indication in memory 40. In one form, one of user entry means 26 is designated a reminder input. Upon user interaction with the reminder input, processor 42 is programmed to initiate a countdown of a period of time until it activates an alarm or other indicator. Once the countdown is complete, processor 42 is programmed so that an alarm or other indicator on bG meter 20 audibly or by vibration alerts the user to perform the event. In one form, the event is measuring a bG level. In another form, the length of the countdown is determined by the number of times a user interacts with the reminder input within a predefined period of time. For example, a single occurrence of user interaction with the reminder input can set the countdown at one hour while a double occurrence of user interaction with the reminder input can set the countdown at two hours. However, it should be appreciated that different lengths of the countdown as well as arrangements for determining the length of the countdown are contemplated.

[0076] Besides memory 40, controller 38 may also include clock 44, display 24, and entry means 26 associated therewith, along with signal conditioners, filters, limiters, Analog-to-Digital (A/D) converters, Digital-to-Analog (D/A) converters, communication ports, or other types of operators as would occur to those skilled in the art to implement the present invention. In the illustrated embodiment, entry means 26 is defined by a plurality of push-button input devices, although entry means 26 may include one or more other types of input devices like a keyboard, mouse or other pointing device, touch screen, touch pad, roller ball, or a voice recognition input subsystem. Display 24 may include one or more output means like an operator display that can be of a Cathode Ray Tube (CRT) type, Liquid Crystal Display (LCD) type, plasma type, Organic Light Emitting Diode (OLED) type, a printer, or the like. Other input and display means can be included such as loudspeakers, voice generators, voice and

speech recognition systems, haptic displays, electronic wired or wireless communication subsystems, and the like.

[0077] As illustrated in FIG. 1 for example, docking device 50 includes a housing 51 which defines its external profile. It should be appreciated that housing 51 can be sufficiently compact so that it can be conveniently hand held and carried by the user. Housing 51 is defined by a sidewall 52 extending around docking device 50 along its elongated sides and first and second ends 58, 60 and between an upper surface 54 and a lower surface 56. In one embodiment, sidewall 52 is formed of a unitary construction, although other arrangements of sidewall 52 are contemplated. As illustrated, the external profile of docking device 50 has a substantially parallelepiped prism configuration. In this arrangement, first and second ends 58, 60 are similarly sized and shaped and surfaces 54 and 56 are also similarly sized and shaped. It should be appreciated however that other configurations for the external profile of docking device 50 are contemplated. Docking device 50 defines an internal receptacle 64 (shown in phantom) extending along a longitudinal axis L of docking device 50 from first end 58 of docking device 50 toward second end 60 of docking device 50. Internal receptacle 64 is positioned between upper surface 54 and lower surface 56 and generally corresponds in size and shape to the external profile of meter housing 22 of bG meter 20. Additionally, in the illustrated embodiment, internal receptacle 64 underlies and is positioned adjacent to at least a portion of display 70, although alternative configurations for the positioning internal receptacle relative to display 70 are contemplated. As indicated by directional arrow A, bG meter 20 is removably positionable within internal receptacle 64 of docking device 50. At first end 58 of docking device 50, internal receptacle 64 extends through sidewall 52 and defines a receiving portion 62 in the form of a window or opening. While not illustrated, it is contemplated that receiving portion 62 can be structured to initiate engagement of bG meter 20 with docking device 50 in a pre-determined alignment. For example, receiving portion 62 can include one or more tapered or angled surfaces configured to direct bG meter 20 into internal receptacle 64. Similarly, while not illustrated, it is contemplated that meter housing 22 of bG meter 20 can have corresponding tapered or angled surfaces to promote its engagement with internal receptacle 64 in the pre-determined alignment. Docking device 50 may also include one or more other compartments or features for storage of lancets, test elements such as test strips 34, cleaning swabs or other items (not shown) which may be useful with system 10.

[0078] A connection element 66 (shown in phantom) is positioned in internal receptacle 64 opposite of receiving portion 62. Connection element 66 is structured to physically engage with connection element 30 of bG meter 20. More particularly, as bG meter 20 is positioned into internal receptacle 64, connection element 66 makes contact with and gradually engages connection element 30 of bG meter 20 to define a communication interface between bG meter 20 and docking device 50 once bG meter 20 is fully positioned in internal receptacle 64. In one form, connection element 66 is a mini-USB plug similar to plug 36 to facilitate engagement with mini-USB port 32 on bG meter 20. However, it should be appreciated that the form of connection element 66 may vary in alternative embodiments as the form of connection element 30 changes. For example, it is contemplated that the engagement between connection elements 30 and 66 may utilize other types of USB connections along with other types of electronic connectors known in the art. As a further alterna-